Save this file as **surname-cell-intro.docx** and email the completed work to your teacher before the end of this lesson.

**Part A**

Follow this link

<http://www.ibiblio.org/virtualcell/tour/cell/cell.htm>

and complete details about the following:

1. **Chloroplasts** are the site of \_\_\_\_\_\_\_\_\_\_\_\_\_\_. They consists of a \_\_\_\_\_\_\_\_\_\_ membrane. The stacks of disk like structures are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_. The membranes connecting them are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ membranes.
2. **Mitochondrion** are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the cell. It is the site of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ membrane. The inner membrane is where most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ respiration occurs. The inner membranes are \_\_\_\_\_\_\_\_\_\_ with a very large surface area. These ruffles are called \_\_\_\_\_\_\_\_\_\_\_. Mitochondria have their own \_\_\_\_\_\_\_\_ and manufacture some of their own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. **Cell Membrane** performs a number of critical functions for the \_\_\_\_\_\_\_\_. It regulates all that \_\_\_\_\_\_\_\_\_\_\_\_\_ and leaves the cell; in multicellular organisms it allows \_\_\_\_\_\_\_\_\_ recognition.

* **Nucleus** is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the cell. It is a large \_\_\_\_\_\_\_\_\_\_ spot in eukaryotic cells. It \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ all cell activity. The nuclear membrane has many \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The thick ropy strands are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The large solid spot is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The nucleolus is a spot of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chromatin. It manufactures \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The chromatin is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in its active form. It is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of DNA and histone proteins. It stores the information needed for the manufacture of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. What are the other organelles described in the cell tour?

**Part B**

Follow this link

<http://www.cellsalive.com/cells/cell_model.htm>

1. Draw the animal cell and plant cell in your workbooks, labelling the organelles.
2. Complete the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Animal Cell | | Plant Cell | |
|  | Present? | Function: | Present? | Function: |
| Nucleus |  |  |  |  |
| Cytosol |  |  |  |  |
| Cell Membrane |  |  |  |  |
| Mitochondrion |  |  |  |  |
| Vacuole |  |  |  |  |
| Cell Wall |  |  |  |  |
| Chloroplasts |  |  |  |  |
| Ribosomes |  |  |  |  |

**Part C**

Read the PDF file “Cell Makeup\_Science Quest

<http://y8sciencepage.wikispaces.com/file/view/Cell+makeup+_Science+Quest.pdf>

and complete the following questions:

1. What do all living things have in common?
2. What is a:
   1. Eukaryote
   2. Prokaryote
3. Complete the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Animalia** | **Fungi** | **Plantae** | **Protocista** | **Prokaryote** |
| Example of organism |  |  |  |  |  |
| Uni/Multi cellular |  |  |  |  |  |
| Nucleus |  |  |  |  |  |
| Cell Wall |  |  |  |  |  |
| Large Vacuole |  |  |  |  |  |
| Chloroplasts |  |  |  |  |  |